U.S. Application No.: 10/796,167

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (currently amended): A recording position correction method for correcting position

deviation in a sub-scanning direction crossing a main scanning direction of a recording position

on a medium to be recorded, wherein an inkjet type recording apparatus performs recording on

said medium to be recorded by ejecting ink from a plurality of nozzles while allowing a

recording head, on which nozzle arrays comprising said plurality of nozzles provided in said sub-

scanning direction are arranged in said main scanning direction, to perform scanning along at

least one of forward and backward paths in said main scanning direction, the method comprising:

determining a position deviation caused by a tilt of the recording head, comprising:

an ejection step of ejecting said ink from said plurality of nozzles onto said medium to be

recorded; and

a measurement step of measuring an amount of position deviation in said sub-scanning

direction of an ink dot recorded; and

correcting the position deviation caused by a tilt of the recording head, comprising: a

correction step of correcting a recording position of an ink dot to be recorded on said material for

each of said plurality of nozzles based on said measured amount of said position deviation;

2

U.S. Application No.: 10/796,167

wherein said deviation is measured based on an interval in said sub-scanning direction between loci drawn by at least one nozzle of each of a first nozzle array and a second nozzle array two nozzle arrays which are not adjacent to each other in said main scanning direction among said plurality of nozzle arrays in said measurement step; and,

wherein said sub-scanning direction is perpendicular to said main scanning direction wherein said at least one nozzle of said first nozzle array and said at least one nozzle of said second nozzle array are located at different positions in said sub-scanning direction in said ejection step.

- 2. (cancelled).
- 3. (currently amended): A recording position correction method as claimed in claim 1, wherein said ink is further ejected from a nozzle of a nozzle array among said plurality of nozzle arrays, except said two nozzle arrays first nozzle array and said second nozzle array, in said ejection step, and

said recording position of said ink dot to be recorded on said material for each of said plurality of nozzles is previously shifted and corrected based on an amount of position deviation of an ink dot ejected and recorded from at least one nozzle of each of said two nozzle arrays first nozzle array and at least one nozzle of said nozzle array except said two nozzle arrays first nozzle array and said second nozzle array in said correction step.

U.S. Application No.: 10/796,167

4. (original): A recording position correction method as claimed in claim 1, wherein said ink is ejected from said plurality of nozzles in order that a color of said ink from each of said nozzle arrays is different from one another in said ejection step, and

said recording position of said ink dot is previously shifted and corrected for each of said colors in said correction step.

5. (original): A recording position correction method as claimed in claim 1, wherein said ink is ejected while said recording head performs scanning along said forward and/or backward path(s) in said main scanning direction in said ejection step, and

said recording position of said ink dot is previously shifted and corrected in said correction step based on an intermediate value between an amount of position deviation of an ink dot ejected and recorded in case said ink is ejected while said recording head performs scanning along said forward path in said main scanning direction and an amount of position deviation of an ink dot ejected and recorded in case said ink is ejected while said recording head performs scanning along said backward path.

6. (original): A recording position correction method as claimed in claim 1, wherein said ink is ejected while said recording head performs scanning along said forward and/or backward path(s) in said main scanning direction in said ejection step, and

correction is performed in said correction step, wherein said recording position of an ink dot to be recorded along said forward path in said main scanning direction is previously shifted

U.S. Application No.: 10/796,167

based on an amount of position deviation in case said recording head performs scanning along said forward path in said main scanning direction and

said recording position of an ink dot to be recorded along said backward path in said main scanning direction is previously shifted based on an amount of position deviation in case said recording head performs scanning along said backward path in said main scanning direction.

7. (currently amended): A recording position correction method as claimed in claim 1, wherein said first nozzle array and said second nozzle array each eject ink of a different color;

wherein said ink is ejected from at least one nozzle of each of the first two-nozzle arrays and the second nozzle array which eject said ink of two colors respectively among said plurality of nozzle arrays as based on a priority is given to a color of which density is highest in said ejection step, and

said recording position of said ink dot to be recorded on said material for each of said plurality of nozzles is previously shifted and corrected based on an amount of position deviation of an ink dot ejected and recorded from said nozzle of <u>each of</u> said <u>first two-nozzle arrays and said second nozzle array</u> in said correction step.

8. (currently amended): An inkjet type recording apparatus for performing recording on said medium to be recorded by ejecting ink from a plurality of nozzles, to perform scanning

U.S. Application No.: 10/796,167

along at least one of forward and backward paths in said main scanning direction, the apparatus

comprising

a recording head on which nozzle arrays comprising the plurality of nozzles provided in a

sub-scanning direction are arranged in a main scanning direction, wherein the ink is ejected from

at least one nozzle of each of two nozzle arrays a first nozzle array and a second nozzle array

which are not adjacent to each other in the main scanning direction among the plurality of nozzle

arrays;

a correcting unit for correcting a recording position of an ink dot to be recorded on said

material for each of said plurality of nozzles based on an interval in a sub-scanning direction,

caused by a tilt of the recording head, between loci drawn by at least one nozzle of each of said

two nozzle arrays the first nozzle array and the second nozzle array which are not adjacent to

each other in the main scanning direction, wherein said subscanning direction is perpendicular to

said main scanning direction;

wherein said at least one nozzle of said first nozzle array and said at least one nozzle of

said second nozzle array are located at different positions in said subscanning direction.

9. (cancelled).

10. (cancelled).

6

U.S. Application No.: 10/796,167

11. (previously presented): A recording position correction method as claimed in claim 1, wherein:

said correction step corrects recording timings of each of the nozzles based on the position deviation, said recording timing defining a timing at which the nozzle ejects the ink.

12. (currently amended): a-A recording position correction method as claimed in claim

1, wherein said deviation is measured based on an ink dot recorded by at least one nozzle of each

of first nozzle array and said second nozzle array two nozzle arraysare most distanced from each

other in said main scanning direction among said plurality nozzle arrays in said measurement

step.